

December 23, 2004

Mary L. Cottrell, Secretary Department of Telecommunications and Energy One South Station Boston, MA 02110

Re: D.T.E. 04-115

Dear Secretary Cottrell:

cc:

On behalf of Massachusetts Electric Company and Nantucket Electric Company, we are enclosing initial comments in the above-captioned proceeding. Thank you very much for the opportunity to provide these comments.

Very truly yours,

Chown Mobania

Anny M Rabrawik

Thomas G. Robinson Amy G. Rabinowitz

Joseph W. Rogers, Office of the Attorney General

### COMMONWEALTH OF MASSACHUSETTS

#### DEPARTMENT OF TELECOMMUNICATIONS AND ENERGY

	)	
Request For Comment On The Procurement of	)	
Default Service Power Supply For Residential	)	D.T.E. 04-115
and Small Commercial And Industrial Customers	)	
	)	

# COMMENTS OF MASSACHUSETTS ELECTRIC COMPANY AND NANTUCKET ELECTRIC COMPANY

### I. Introduction and Executive Summary

Massachusetts Electric Company and Nantucket Electric Company (together, "Mass. Electric" or "Company") appreciate the opportunity to provide comments to the Department of Telecommunications and Energy ("Department") regarding its investigation into the procurement of Default Service for residential and small commercial and industrial customers (DTE 04-115). The Department restates its commitment to maintaining and improving a sound framework for a competitive market for all customers, but notes that the development of a competitive market serving residential and commercial customers ("Small Customers") has lagged. Mass. Electric concurs with the Department on these issues and also with the fact that some form of Default Service will continue to play a central role in the further development of the competitive market, and in ensuring that electric service is available at a reasonable price for Small Customers.<sup>1</sup>

Mass. Electric's comments address the Department's specific questions posed in this docket, and the Company recommends further investigations into certain aspects of the provision of Default Service including the potential benefits a state-wide approach could afford within a competitive market program

<sup>&</sup>lt;sup>1</sup> Commercial customers in these comments represents Mass. Electric's customers receiving service pursuant to its Rate G-1, General Service and streetlighting tariffs. This is consistent with the Department's definition of commercial customers for Mass. Electric pursuant to DTE 99-60.

<sup>&</sup>lt;sup>2</sup> In the Department's prior proceeding on Default Service procurement policy, Mass. Electric suggested that the retail market for Small Customers could be facilitated by implementing an aggregation auction for this customer group. Failing that, Mass. Electric supported a longer-term procurement approach (twelve-month contracts) for Small Customers, who are otherwise provided limited alternatives in the market. The Department adopted the longer term approach in that proceeding for the Small Customers, and shortened the procurement period for the large commercial and industrial customers, who were provided with alternatives in the market. Docket D.T.E. 02-40-B. Mass. Electric's comments in this case reflect that prior policy judgment, and respond to the Department's questions in the context of that order.

aimed at providing Default Service at reasonable cost while also reducing the existing barriers to the development of the competitive market. Mass. Electric's main conclusions are

- 1. The current procurement policy is operating well for Small Customers. Increasing the frequency of procurements limits the effects associated with any single procurement occurring at a time of adverse market conditions. However, this approach also reduces the amount of energy purchased in any single offering and may not work for smaller utilities. Moreover, this approach, assuming quarterly procurements of twelve-month fixed price contracts, would result in quarterly price changes, rather than today's semi-annual changes under the current six-monthly procurements of annual fixed price contracts. Mass. Electric's analysis (see attachment 1) suggests that moving to quarterly procurements does not afford significant benefits over the existing approach, however quarterly procurements could be implemented with little additional administrative cost and still maintain a vibrant procurement process.
- 2. Mass. Electric opposes extending the term of procurement contracts beyond twelve months due to the risks and costs associated with such contracts, and the lack of connection to current market prices. Longer term contracts carry additional risks and costs due to increased uncertainty surrounding the quantity of load to be served, and the greater potential for market rule changes. A regulatory system which required Utilities to enter into long term contracts and also imposed the ISO's proposed Locational Installed Capacity mechanism would transfer risks back from generators to customers and in doing so afford a pseudo-regulated income stream to competitive generators. Such a move would hold the potential for customers being burdened with further stranded costs, and is contrary to the objectives of deregulation.
- 3. A laddering approach for Default Service may inhibit the development of the competitive market for Small Customers by reducing the connection between Default Service prices and market prices without necessarily providing significantly more stable retail prices than the existing procurement approach. The disconnection from market prices increases if procurements for some components of the portfolio are extended for longer terms, as do costs and risks as identified above.

- 4. There may be merit in moving to a state-wide procurement based on load zones. Mass. Electric recommends further investigation into the merits of such an approach as a key element of a competitive market program.
- 5. The current Request for Proposals process works well for the existing procurement approach. Should the Department consider moving to a state-wide procurement, then it should consider the deployment of a descending clock auction, which may afford benefits over a Request for Proposals approach given the multiple contracts involved in a state-wide process.
- 6. Mass Electric proposes that the change in name from Default Service to Basic Service be expedited to coincide with the end of Standard Offer Service.

## II. Default Service Power Supply Procurement Options for Small Customers

# The Operation of the Current Policy

The current procurement policy for Small Customers established under Docket D.T.E. 02-40-B requires a solicitation every six months for 50 percent of the annual requirements for the Small Customer load served on Default Service. The Default Service supply costs under the two semi-annual auctions are then averaged to produce more stable Default Service prices for Small Customers than had occurred under the prior practice of single auctions every six months for 100 percent of the Default Service load. Under this approach, the Default Service prices at retail are fixed for a six-month term, and the procurements of that power extend for twelve months. The current policy maintains the pre-existing "fixed six-month option" for retail pricing of Default Service as the appropriate "balance to be struck between providing sufficient price certainty as well as efficient price signals and price efficiency than does [the prior] approach" (D.T.E. 02-40-B, p. 44). At the same time the current policy extended the procurement terms and adopted semi-annual purchases in order to "strike a better balance between price certainty and price efficiency ..." (D.T.E. 02-40-B, p. 45).

The Department's current approach also complies with the statutory requirements for Default Service. Under G.L. c. 164, s. 1B (d), Default Service must contain a payment option "with rates that

remain uniform for periods of up to six months." The Department's current approach fully meets that statutory requirement, adds price stability by extending the procurement terms out to twelve months, and limits the risk of a single procurement that "could result in prices that represent an anomalous market condition" (D.T.E. 02-40-B, p. 45). In short, the Department's current procurement and pricing policy is based on a careful balance of the risks and rewards of alternative approaches, implemented within the constraints of the statute.

1. Would customers be better served if power supply for Default Service is procured using a portfolio of more than two solicitations? Please discuss the advantages and disadvantages of increasing the number of solicitations used to procure Default Service supply.

The current procurement policy is operating well for Small Customers and Mass. Electric does not consider it necessary to increase the number of procurements.

A decision to increase the number of Default Service solicitations should be evaluated in light of the wholesale and the retail market. With regard to the wholesale market, more frequent solicitations for smaller tranches of twelve-month power contracts generally produce a smoother price track for customers, and reduce the exposure to contracting for large quantities of power at times of adverse market conditions. These advantages are offset by the need for more frequent changes in the retail market price for Small Customers taking Default Service. For example, quarterly procurements of twelve-month fixed price Default Service power supplies will require quarterly changes in the retail Default Service price. Additionally there will be a reduction in any benefit through contracting for large quantities at times of beneficial market price. As summarized above, the length of the fixed-price period for Small Customers was given careful consideration by the Department in Docket D.T.E. 02-40-B, and the Department concluded that it was appropriate to continue the pattern of price changes every six months.

The key question is whether more frequent solicitations should take place, and if so, how frequently. The process of running a Request for Proposal ("RFP") requires an investment in resources from both the utility and prospective power suppliers. For suppliers to invest this time, the result of the RFP must be worthwhile, which will depend on the level of the load that is put out to bid. For Mass. Electric, it is feasible to retain the current power procurement mechanisms and move to a quarterly procurement of 25% of the Small Customer load on a twelve-month basis. Smaller utilities may not have

loads of sufficient size to support quarterly procurements. For Mass. Electric, a movement to a monthly procurement schedule (12 RFPs per year for each of the three load zones in which it provides service) would limit the size of each auction, and require a significant revision of the procurement process to ensure that the bidding and acceptance of bids became a highly mechanised procedure with all terms and conditions agreed and reasonably static during the year. The smaller auctions may limit interest by bidders, and the reduced time in which to amend contract terms ahead of each procurement may introduce risks into the process which are managed today through the terms and conditions being carefully considered at the time of each solicitation, and sometimes amended to account for market issues ahead of each RFP.

Because of these administrative issues associated with the auction and the potential need to change retail prices monthly, Mass. Electric does not recommend a change to monthly procurements for Small Customers. Rather, Mass. Electric believes that the current mechanism is working reasonably well for Small Customers, and the central issue is whether wholesale procurements can be improved by moving to a quarterly procurement system (or to the laddered approach, on which the Department has also requested comments). To assist in that evaluation, and to assess a laddering approach, Mass. Electric has analyzed the effect of five different procurement strategies on retail price stability and connection to underlying market price. The analysis (which uses gas market data) is described in detail in Attachment 1. The five procurement approaches considered are:

- Two solicitations per year (one every six months January and July) each for 50% of the load.
   Each twelve month contract has a schedule of fixed monthly prices.
- Four solicitations per year (one every three months January, April, July and October) each for
   25% of the load. Each twelve month contract has a schedule of fixed monthly prices.
- Two solicitations per year (one every six months January and July) each for 50% of the load.
   Each contract has a single fixed price over the twelve month period.
- Four solicitations per year (one every three months January, April, July and October) each for
   25% of the load. Each contract has a fixed price over the twelve month period.

5. A laddering approach comprised of 3 year, 2 year, 1 year and 6 month contracts which are assumed to be put in place on a staggered basis.

Mass. Electric concludes from the analysis that:

- Assuming that natural gas prices are a reasonable indicator of electricity prices, the analysis
  suggests there is no clear driver to increase the number of solicitations. However, it would take
  moderate effort on behalf of Mass. Electric to apply a quarterly approach and this could be
  considered if there were other drivers to adopt such an approach.
- The laddering effect appears to reduce variability in retail prices compared to some alternative approaches, but at the expense of losing a reasonably close connection to the wholesale market and potentially at higher cost (see response to question 2). Similar levels of price stability appear to be delivered by the existing procurement policy. The price stability effects under a laddering approach stem primarily from the longer term commitments in the laddered portfolio, which hold average prices down in an increasing market and hold prices up in a declining market. The lagged, average prices may therefore hinder the development of the competitive market. Specifically, customers will tend to switch from the market to Default Service when prices increase, undermining the market shares of competitive suppliers. Although competitive suppliers may wish to engage in a laddered procurement strategy when risk managing a portfolio for customers served under long term contracts (or simply if they expect to gain a competitive advantage through doing so), customers taking Default Service make no long term commitment and therefore Default Service should continue to be supplied with short-term wholesale procurements. Specifically, distribution companies should neither enter the risk management business nor pro-actively manage a portfolio of long term contracts for customers who are not committed to take the service over the long term. These issues combined with the inherent risks (and potential costs) associated with entering into contracts in excess of 12 months leads Mass. Electric to conclude that laddering is an inappropriate procurement policy for utilities in the deregulated environment. Such approaches are best left to the competitive suppliers as a means of offering stable prices to those customers who value such arrangements.

2. Would smaller customers be better served if power supply for Default Service was procured for a term longer than twelve months? Please discuss the advantages and disadvantages of using supply terms greater than twelve months.

Mass. Electric opposes extending the term of procurement contracts beyond twelve months due to the risks and costs associated with such contracts creating the potential for customers to be burdened with further stranded costs, and because of the lack of connection to current market prices. For customers to bear such risks, in addition to the ISO's Locational Installed Capacity ("LICAP") proposals, is contrary to the objectives of deregulation.

As explained in the response to the last question, Mass. Electric does not believe that distribution companies should make long term commitments to provide Default Service to customers. The power supply commitments in the wholesale procurement policy should take into account the retail commitments by Default Service customers. Under the law, Default Service customers can leave utility supplied generation service and receive such service from a competitive supplier at any time. Moreover, in light of the significance of past rule changes within the New England power market and the uncertainty of potential future rules changes, the magnitude of the market risk premium required for suppliers to assume the risks of such changes suggests that a considerable cost increase for Default Service customers would result from appreciably extending the term of Default Service supply procurements. As a result, the power supply commitments to serve those customers should continue to be short-term, and not longer than one year.

In contrast, in competitive electricity markets, contract terms are generally of two main types: wholesale market-backed and generation unit output-related. Wholesale market-backed contracts are where the provider of the contract hedges its exposure by trading on the wholesale market. The duration of these contracts tends to reflect the time horizon over which the wholesale market is trading with reasonable liquidity, currently up to three years in New England. Given the degree of market rule changes within the New England power market over recent and current times, the uncertainty and risk created by these changes reinforces the tendency towards shorter term contracts of one year duration or less.

Generation unit output-related contracts, on the other hand, are where a newly built power plant is backed by a unit power contract (for all or a portion of the unit's production) developed to support the financing of the investment. These unit power contracts tend to be related to the economic life of the plant and will span 20 years or more. These are not appropriate contracts for utilities to enter into in the current deregulated environment.

## 2a. Are longer term contracts likely to produce lower prices?

There is no foundation to expect lower prices simply by extending the term of the contract, in fact higher prices may result from longer term contracts.

The longer the contract term, the greater the uncertainty surrounding the quantity of the load that is being served, and this increase in uncertainty is likely to lead to higher risk premiums in the contract price. A longer term contract (e.g. more than 12 months but less than 5 years) will generally produce two distinct outcomes. First, in many cases the wholesale market price will oscillate above and below the contract price throughout the contract term. Second, there is the potential that, the procurement will take place at a time of unusually low or unusually high market prices and the contract price will remain consistently below or consistently above market rates during the contract term. In the second case, there may be a rate shock either at the beginning or the end of the procurement period.

The Company's experience in discussing contract terms with generators is that some may value longer term certainty for the recovery of their fixed costs of generation, but will want variable prices to recover their energy costs which are driven by underlying fuel prices. By fixing the output price they receive, a generator creates an exposure to gas, oil or coal prices (depending on their input fuel) which the generator would then need to hedge in order to lock in a profit. Given the extent of volatility in gas prices combined with uncertainty over the market rules, there is no foundation for expecting lower prices simply by extending the contract period, and it may in fact lead to higher prices.

Currently, even though retail competition for Small Customers is limited, wholesale suppliers still incorporate the risk of customer migration and changing usage patterns into their bids for all-requirements service for Default Service customers. Customer migration should increase as below-market Standard Offer rates expire in March, and marketers develop strategies to overcome the challenges of creating

scale in the Small Customer sector. In any event, Default Service suppliers will continue to take the risk of changing load caused by changes in weather, underlying economic activity, and customer migration into and out of the distribution company's service territory. One would expect that all of these risks would increase with the term of the contract for Default Service. Thus, in general, the longer the contract term, the greater the uncertainty surrounding the quantity of the load that is being served, and one would expect that this increase in uncertainty would lead to higher risk premiums in the contract price.

## 2b. How would longer term contracts affect price certainty and market efficiency?

Price Certainty. To the extent that a fixed-price load following all-requirements contract is entered into on a long term basis, then this clearly provides an extended period where prices will be known. However, market rule changes can create changes in market costs which, unless they are foreseen within the contract, will lead to cost increases and/or costly litigation. The longer the term of the contract, the more likely such events will occur, and thereby render a fixed price into a changing price.

Market Efficiency. The term Market Efficiency may relate to a number of different features. Mass. Electric has responded on two aspects of market efficiency – the connection of retail prices to wholesale prices, and the dilemma of ensuring that competitive players are able to respond to the market and provide sufficient capacity at the appropriate time.

**Connection to Market Prices:** The very nature of longer term contracts is to provide insulation from the vagaries of market prices. The longer the term of the contract the higher the risk that the contract price will significantly deviate from prevailing market prices.

Capacity Adequacy: The extent to which new generation is required in the New England market in the future and whether the current market structure and policies are adequate in ensuring appropriate investments are made at the right time is a matter of much debate. The ISO is considering a LICAP mechanism for the very purpose of providing sufficient financial incentive for appropriate levels of capacity to be made available. This proceeding, now pending at the Federal Energy Regulatory Commission, involves the implementation of significant new charges to support new entry into the generation market. Given that initiative, which if implemented will provide payments to generation without long-tem contractual commitments by distribution

companies, Mass. Electric does not believe that it is appropriate or necessary for the Department to require any extensions of the contract terms for Default Service procurements for Small Customers. The premise of deregulation was that certain risks transferred from customers to competitive providers. A regulatory system which required Utilities to enter into long term contracts and also imposed a LICAP mechanism would transfer those risks back from generators to customers and in doing so afford a pseudo-regulated income stream to competitive generators. Such a move would hold the potential for customers being burdened with further stranded costs, and is contrary to the objectives of deregulation. The development of the competitive retail market remains a vital step in ensuring customers retain the benefits of competitive generation. A vibrant retail market would allow competitive suppliers with a profit stake in actively managing risk on behalf of their customers to provide wholesale market pressure through reflecting customers' willingness to take risk and pay for commodity. In such a competitive environment customers can exercise choice by switching to another supplier thereby leaving the risks of procurement decisions with Competitive suppliers.

# 2c. How could longer term contracts be tailored to accommodate customer migration to competitive supply?

Under Mass. Electric's traditional approach to Default Service procurement, the Default Service supplier assumes the risks associated with changes in load and customer migration to and from the competitive market. As we have explained, extending these contracts and increasing these risks would be costly to customers. In addition, the existence of a longer-term contract is likely to lead to extended periods where the market price is above (or below) the contract price. From the competitive market perspective, this leads to competitive suppliers being reluctant to enter into this sector as they cannot be assured of being able to offer competitive products to customers over a reasonable space of time. To address both these issues and to maintain the relation between retail and wholesale obligations, Mass. Electric recommends that the contracts for Default Service continue to be limited to a term of no longer than twelve months.

M.G.L c. 164, Section 94A requires that the Department approve contracts for the purchase of electricity in excess of one year, and provides that the Department may exempt any electric or generation

company from any or all of the provisions of this section upon a determination by the Department, after notice and a hearing, that an alternative process or incentive mechanism is in the public interest.

However, for the reasons outlined above, Mass. Electric is strongly opposed to any extension of the contract term beyond 12 months under the existing procurement policy and market framework.

Rather than reinserting the distribution company back into the commodity supply business, Mass. Electric believes that is critical to address the key issues that have impeded the development of a vibrant retail market for Small Customers, these issues include:

- Standard Offer prices have generally been lower than wholesale prices for extended periods of time preventing Competitive suppliers from offering competitive products to Small Customers and making it difficult to excite customers about the prospect of competition.
- Competitive suppliers have indicated that customer credit is an issue in tackling the Small Customer market.
- 3. Creating scale is a barrier for competitive suppliers.

Standard Offer will end on March 1, 2005, eliminating the first impediment to the Small Customer market, however Mass. Electric believes that further consideration should be given to developing competitive market programs which would address the remaining issues. Such programs may include state-wide procurements and could build upon some of the innovative ideas recently filed with the New York Public Services Commission by Mass. Electric's affiliate Niagara Mohawk. <sup>3</sup>

4. Would smaller customers be better served if power supply for Default Service was procured on a state-wide basis? Please discuss the advantages and disadvantages of using a state-wide approach to Default Service procurement.

There are circumstances in which a state-wide solicitation may have merit. For example, the Department could implement a state-wide solicitation, similar to the approach followed in Maine<sup>4</sup>. However, Mass. Electric believes that state-wide procurements would be implemented most efficiently at

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<sup>&</sup>lt;sup>3</sup> Competitive Opportunities Development Plan filed by Niagara Mohawk on December 21, 2004 in response to New York Public Service Commissions Order: Statement of Policy on Further Steps Toward Competition in Retail Energy Markets, issued on August 25, 2004 in case No. 00-M-0504

<sup>&</sup>lt;sup>4</sup> Note that Maine's solicitations relate to each Distribution service territory and not for supply at the state level.

the load zone level, given the differences in market prices between zones. Specifically, both the wholesale procurements and the retail prices should be established by zone. If the RFP operated without recognizing load zones, then, as the load changed in each zone (either through normal variations in demand or due to customers migrating to the competitive market), the Default Service supplier's wholesale costs would increase or decrease by the load zone price while its revenue from the retail sale would change at the average rate<sup>5</sup>. It is therefore likely that Default Service suppliers would charge a premium under a state-wide average pricing approach. To avoid the premium, and to provide clearer price signals, the wholesale Default Service procurements and the retail Default Service prices should both be implemented on a zonal basis. Procurements should be based upon a separate request for bids for the load in each load zone, and the customers in each load zone would see the same Default Service rate regardless of which utility delivered the power.

The zone-specific procurement and retail price has a number of advantages. All retail customers within the zone will pay the same price for Default Service. Competitive suppliers will find it easier to compile their marketing materials when they are competing against a common Default Service rate.

The establishment of a state-wide procurement system would take time and need careful development to ensure a smooth transition from the current approach. It could not be implemented by March 2005. New legislation may be required to establish the authority of the state to develop contracts and engage in the procurement effort. In particular, the issue of who would be the contracting counterparty is a material one, and one which the Maine Public Utilities Commission has not totally resolved. Mass. Electric recommends that the Department more fully investigate a state-wide procurement as part of a competitive market program as a result of this docket.

4. Would smaller customers be better served if power supply for Default Service was procured using an auction process (e.g. descending clock) rather than through requests for proposals? Please discuss the advantages and disadvantages of using an auction process to procure Default Service. In particular, please discuss whether using an auction is likely to produce lower Default Service prices.

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<sup>&</sup>lt;sup>5</sup> Even if a mechanism were implemented to enable the supplier to receive zonal revenues, if the retail price is a state-wide average then the migration risk would be far greater than under a zonal-based price (customers in low priced zones will be charged more than they should and would therefore be attractive to competitive suppliers, leaving higher than average cost customers on Default Service) and therefore attract a premium.

The current RFP approach to procuring power requires suppliers to bid under a sealed bid approach and already is a robust auction and appropriate for the current procurement approach. However, should the Department consider moving to a state-wide approach to procurement, then it should consider a descending clock auction approach in order to accommodate the multiple contracts inherent in such a program.

Under the current RFP approach having agreed terms and conditions ahead of the bid date leaves the price as the only remaining variable. The Default Service suppliers' bids are determined by what price they are prepared to serve the load at, and what they anticipate other bidders may bid. With up to 10 bidders responding to Mass. Electric's RFPs, there is a good level of competition. Under the current RFP approach, winning bidders are paid their bid price.

There is much academic debate about the efficacy of various types of auctions, most of which is inconclusive, and demonstrating a definitive outcome other than under a specific set of circumstances is very difficult. Descending clock auctions, a variation of the Simultaneous Multi-Round auction format, can have merit over sealed bids in the instance where bidders are bidding for multiple contracts simultaneously. In a descending clock auction the bidder sees the bids of other players and is therefore not guessing what the competitors are offering. This can result in less price pressure and increased bids. On the other hand, the bidders can independently change bids on each contract and withdraw from one contract bidding while continuing to bid on the others. Under an RFP for multiple contracts a bidder who wanted to win two contracts would maximize the likelihood of achieving this objective through bidding for more than two contracts. However in doing so, the bidder would bid defensively (higher) to allow for the possibility that the bids may result in all contracts being won. In 2002 the New Jersey Board of Public Utilities selected the descending clock auction format for the procurement of electricity for sale to Default Service customers with some success. This auction process was applied where a number of contracts were being bid upon simultaneously; which is the key feature that descending clock auctions are tailored to.

For the most part, however, the Massachusetts utilities' procurement timetables mean that they are not in the market at the same time, and therefore each supplier is only ever bidding on one RFP at

any one time. Under these circumstances there is no clear reason to suggest that the descending clock auction format will produce lower prices than the current RFP process. However, should the Department consider moving to a state-wide approach to procurement, then it should consider a descending clock auction approach in order to accommodate the multiple contracts inherent in such a program.

5. Although the term "Default Service" is statutory, G.L. c. 164, § 1, it has confused some customers because of its unintended suggestion of nonfeasance in performing a legal or contractual obligation. Is there a better or more descriptive term that ought to be used by the distribution companies on and after March 2005?

Mass. Electric concurs with the Department's view that the term "Default Service" carries the suggestion of nonfeasance. A more appropriate term which describes the role that such a product has in the market but which does not have negative overtones would be "Basic Service". This term describes the utility-offered service appropriately without a negative connotation. Mass. Electric recommends that the Department allow this change in nomenclature as soon as possible so that it can be used to refer to the Default Service that will be provided as of March 1, 2005, following the end of the Standard Offer period. Implementation at this time avoids confusing customers, who would otherwise be transferred first to "Default Service" and then would be notified of a name change to "Basic Service." Implementation at this time will also reduce the overall call volumes to the utilities by combining two changes into one. Given the deadlines associated with this docket, Mass. Electric recommends that the Department expedite this particular aspect of the docket and issue an order as soon as possible so that it can be included in informational materials to customers. Mass. Electric would welcome working with the Department and other utilities to develop and implement a state-wide customer communication program to explain the change and to develop consistent messages concerning the end of Standard Offer.

Although "Default Service" is defined by statute, the change in name is non-substantive and will not affect the distribution company's statutory obligations. Rather, the change is designed only to better describe the service that is being provided by the distribution company in a way that improves communications with customers. The Department can implement this administrative change through regulation or order, which clearly refers back to the statutory definition.

Respectfully submitted,

MASSACHUSETTS ELECTRIC COMPANY NANTUCKET ELECTRIC COMPANY

By their attorneys,

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Dated: January 10, 2005

#### Introduction

In order to evaluate the potential impact of alternative procurement policies, Mass. Electric has modelled alternative scenarios using data from the gas market. Price transparency for natural gas is significantly better than for electricity, making analysis of the forward prices at various historical points in time possible. The analysis focused on the impact of procuring different tranches of power supplies on price stability and their connection to underlying wholesale market prices. Given that gas prices tend to drive the energy prices for electricity in the ISO-NE market, the results of the analysis of gas can be used to evaluate various Default Service procurement approaches. The actual effects seen under any one procurement approach will of course differ depending upon the actual level of future prices and the degree of volatility exhibited in the electricity market.

Five procurement approaches have been modelled and the "retail" prices derived under each approach compared for the pricing period January 2003 to December 2004.

## The five procurement approaches are:

- 1. Two solicitations per year (one every six months -- January and July) each for 50% of the load. Each twelve-month contract has a schedule of fixed monthly prices (the forward gas price for the specific month at the time of the solicitation), and a new 'retail' price is established each month as the average of the two monthly prices from each contract schedules.
- 2. Four solicitations per year (one every three months -- January, April, July and October) each for 25% of the load. Each twelve-month contract has a schedule of fixed monthly prices (the forward gas price for the specific month at the time of the solicitation), and a new 'retail' price is established each month as the average of the four monthly prices from each contract schedule.

<sup>&</sup>lt;sup>6</sup> Note. Retail in this case is simply the composite of the forward natural gas prices and does not include any other costs associated with the gas market. No assessment been made of premiums which would be applied in relation to the risks of load following contracts, nor of risk premiums relating to migration risks and longer term contracts.

- 3. Two solicitations per year (one every six months -- January and July) each for 50% of the load. Each contract has a single fixed price over the twelve month period (the average of the forward gas prices), and every 6 months a new "retail" price is established as the average of the two current contract prices.
- 4. Four solicitations per year (one every three months -- January, April, July and October) each for 25% of the load. Each contract has a fixed price over the twelve month period (the average of the forward gas prices), and every three months a new "retail" price is established as the average of the four current contract prices.
- 5. A laddering approach comprised of 3 year, 2 year, 1 year, and 6 month contracts each for 25% of the load, which are assumed to be put in place on a staggered basis. The contracts all have a single price for the duration of the contract (the average of the forward gas prices), and the "retail" price is the average of the four contract prices in place at any one time. The contracting period and pricing periods are illustrated in Figure 1

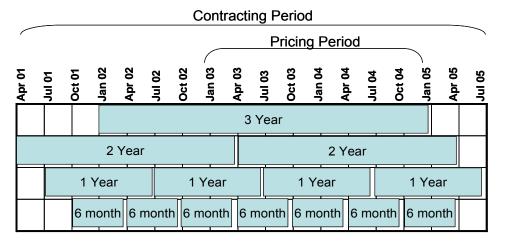


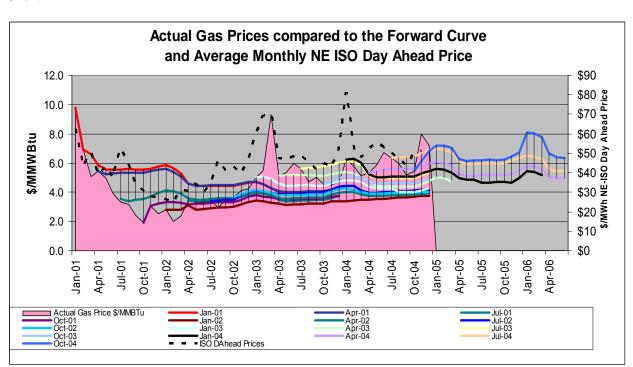
Figure 1

## The Data Used in the Analysis

The actual monthly natural gas prices used in the analysis are the average of the forward prices published in the Wall Street Journal on the last three days of the trading month.<sup>7</sup>

The gas prices used in formulating the contract prices are the forward prices quoted at the time the contract would have been entered into under the procurement schedule. Having formulated the contract prices, the absolute deviation from the actual monthly natural gas price was measured. Chart 1 shows the forward curves and monthly gas prices, together with high/low markers. The NE-ISO day average monthly day-ahead market price is also shown. The forward curves during 2001 and 2002 tended to over estimate future prices, whereas the 2003 and 2004 curves have tended to under estimate monthly gas prices.





<sup>&</sup>lt;sup>7</sup> In some instances data was not published for all three days, in these cases either the available data for the other days or data relating to the nearest published month has been used, or the latest available data point scaled in accordance with the previous price trend.

### **Results of the Analysis**

Chart 2 illustrates that there is generally little difference in the average price under each of the approaches, except for the period in early 2004, which is due to high levels of volatility in the gas price. The laddering approach affords slightly lower prices than the other strategies during 2004. These lower prices are the result of the longer term contracts included in the portfolio creating a lagged effect, which in a rising market is beneficial. Clearly, in a falling market (e.g. the period immediately following January 2001), the reverse trend would be seen, which would not be advantageous to customers.

Chart 3 shows the percentage deviation of the prices derived under each of the four approaches from the monthly gas price. Table 1 summarizes the average price and absolute percentage deviation of the derived contract prices from the underlying actual monthly natural gas prices. The data indicates that

- All four approaches reduce the amount of variability exhibited by the "retail" price by about 50% (see "spread as % of average price") compared to the variability in actual monthly gas price.
- 2. The number of price changes experienced by retail customers varies from monthly under the approaches using a schedule of prices, quarterly for the approach using four procurements of 25% with a fixed contract price, and 6 monthly under the existing approach. Laddering results in approximately quarterly price changes but the frequency depends upon the pattern of procurements.
- 3. As expected, due to the less frequent price changes, the approaches based on two procurements of 50% exhibit less variability (spread as % of average price) than those based on four procurements of 25%. The '2 \* 50%' approach, which uses fixed prices rather than a schedule of prices, and the laddering approach exhibit the most stability. The laddering approach is only marginally more stable than the 2 \* 50% Fixed price approach.
- 4. The average % deviation from market prices (see table 1) is broadly similar between all the approaches. The laddering effect exhibited a more pronounced average absolute % deviation during the second year of the analysis than the other four approaches (see chart 3), which suggests that the lagged effect of laddering increases the disconnection between retail and wholesale market prices.

5. All approaches resulted in an average price over the two years which were less than the actual monthly gas price. This is a consequence of the analysis period covering a time of rising gas prices and the procurement timing creating a lagged effect. The opposite would be seen under a falling market price where "retail" prices would be higher than the wholesale market price. To illustrate the impact of a rising versus a falling market on the various procurement approaches, Chart 4 shows the second twelve-month period of the analysis when prices are clearly on an upward trend. In comparison, Chart 5 shows how the prices compare to each other during a period of downward price trends. The data for this second graph is synthesised to create a generic price track and, although based on real data, is not an actual price track. As can be seen the laddering approach affords higher prices in a falling market than the alternative approaches and lower prices in a rising market.

As explained in the response to question 2, it is likely that longer term contracts would attract a premium over the forward curve. This analysis has not included any adders in the "retail" prices to reflect this. As a result, the prices formulated for the laddering approach are likely to under-estimate the level of price relative to the other approaches which are based on twelve-month contracts. This will reduce the benefits of laddering in a rising market, and increase the above-market costs in a falling market.

### **Conclusions**

- 1. Assuming that natural gas prices are a reasonable indicator of electricity prices, this suggests there is no clear driver to increase the number of solicitations required by the procurement policy. However, it would take little effort on behalf of Mass. Electric to implement a quarterly approach and quarterly procurements could be considered if there were other drivers to adopt such an approach.
- 2. The laddering effect appears to reduce variability in retail prices, but not significantly compared to the existing procurement approach, and does so at the expense of connection to the wholesale market. The reduced variability stems from the longer term contracts that are included in the portfolio. The longer term contracts do not match the term of wholesale

procurements to the commitments provided by customers taking Default Service, and will hinder the development of the competitive market by encouraging customers to switch back to Default Service in times of rising commodity prices. These issues combined with the inherent risks (and likely premiums) associated in entering into contracts in excess of 12 months leads Mass. Electric to conclude that including long term contracts in a Default Service portfolio is an inappropriate procurement policy for utilities in the deregulated environment. Such approaches are best left to the competitive suppliers as a means of offering stable prices to those customers who value such arrangements.

Chart 2

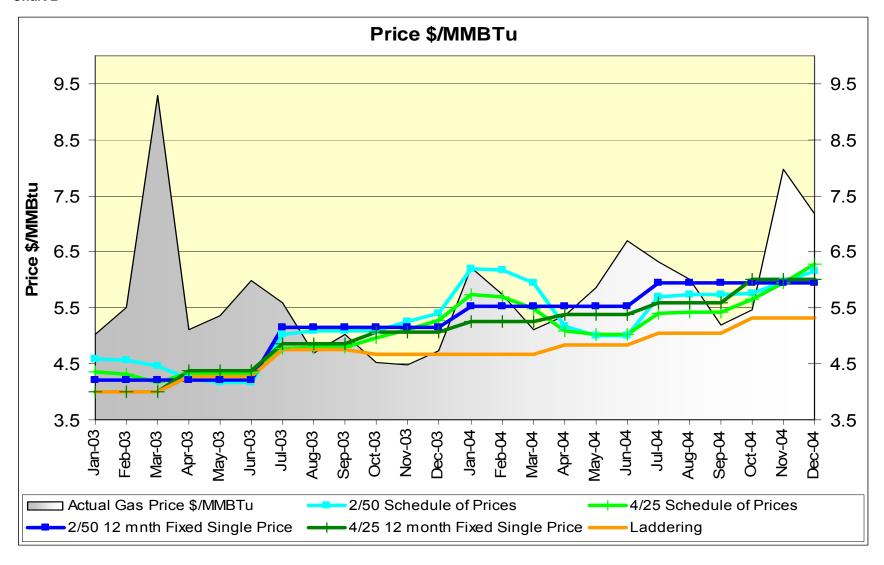


Chart 3

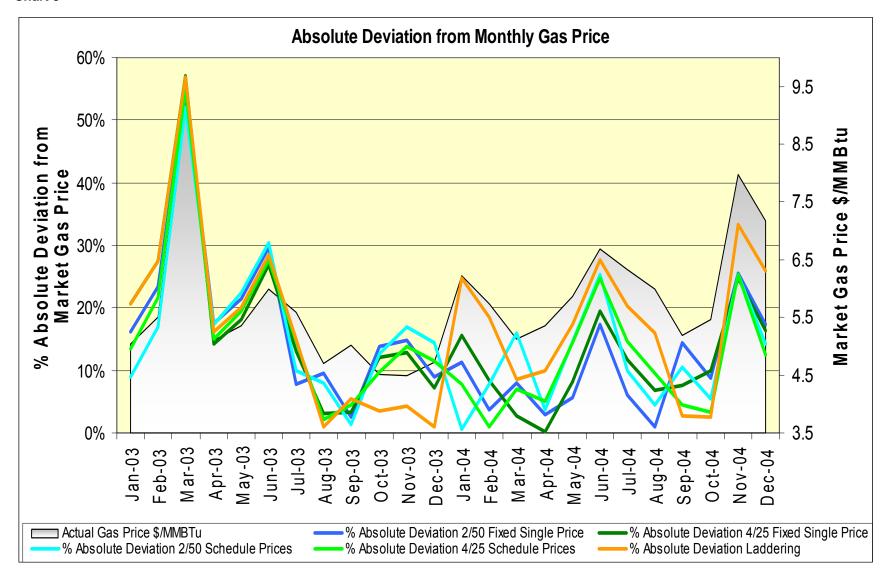
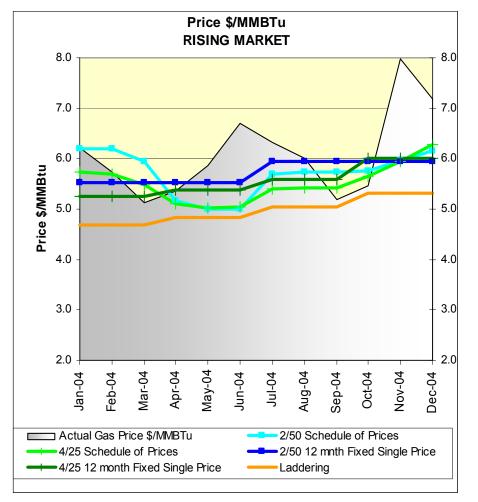


Chart 4



# Chart 5

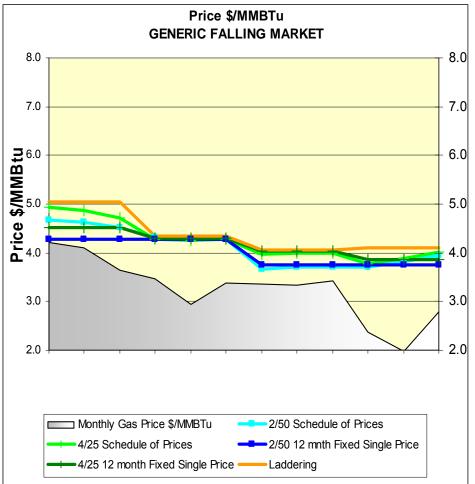


Table 1

		'Retail' Prices and average absolute % deviation from Actual Gas Prices over 2 Year Period Jan 2003 – Dec 2004										
			Approach 1 2 * 50%, Schedule of Prices		Approach 2 4 * 25%, Schedule of Prices		Approach 3 2 * 50% Fixed Price		Approach 4 4 * 25% Fixed Price		Approach 5  'Laddering'	
		Actual Gas Prices	'Retail' Price	Absolute % Deviation	'Retail' Price	Absolute % Deviation	'Retail' Price	Absolute % Deviation	'Retail' Price	Absolute % Deviation	'Retail' Price	Absolute % Deviation
1	Average	5.77	5.2	15%	5.1	14%	5.2	14%	5.1	15%	4.7	17%
2	Max	9.28	6.2	52%	6.3	55%	5.9	55%	6.0	57%	5.3	57%
3	Min	4.49	4.2	1%	4.2	1%	4.2	1%	4.0	0%	4.0	1%
4	Spread	4.80	2.0		2.1		1.7		2.0		1.3	
5	Spread as % of average	83%	39%		41%		33%		40%		28%	

Row 1 = Average price over two year period

Row 2 = Maximum price over two year period

Row 3 = Minimum price over two year period

Row 4 = Maximum Price minus Minimum Price

Row 5 = row 4 / row 1 \* 100

Average Absolute % Deviation =  $\Sigma_i^n$  (Absolute (i.e. all negative values are changed to positive values) difference between the contract and monthly market prices / monthly market price \* 100)/n, where n= number of months (All prices in table 1 are \$/MMBtu)